

REMARKS

Applicants appreciate the Examiner's thorough consideration provided the present application. Claims 1-11 are now present in the application. The drawings and claims 1 and 8 have been amended. Claims 12 and 13 have been added. Claims 1 and 8 are independent. Reconsideration of this application, as amended, is respectfully requested.

Drawings Objections

The drawings have been objected under 37 C.F.R. § 1.84(p)(5). Applicants have submitted two (2) sheets of corrected formal drawings to address the Examiner's requested changes. Accordingly, Applicants respectfully submit that these objections have been obviated and/or rendered moot. Reconsideration and withdrawal of the Examiner's drawings objections are respectfully requested.

Claim Rejections Under 35 U.S.C. § 102

Claims 1-11 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Iwasa et al., U.S. Patent No. 5,798,545. This rejection is respectfully traversed.

In light of the foregoing amendments to the claims, Applicants respectfully submit that this rejection has been obviated and/or rendered moot. As the Examiner will note,

amended independent claim 1 and 8 have been amended to recite combinations of elements including "said deep trench capacitor having a first side and a second side opposite to said first side, said transistor being on said first side of said deep trench capacitor" and said third region (in claim 1)/said buried strap (in claim 8) "being on said second side of said deep trench capacitor". Applicants respectfully submit that the above combinations of elements as set forth in amended independent claim 1 and 8 are not disclosed nor suggested by the references relied on by the Examiner.

Iwasa discloses a semiconductor storage device including a transistor #300 with regions 15 and 16, a capacitor #400, and a region #100. In particular, Iwasa teaches the region #100 and the transistor #300 are on the same (right) side of the capacitor #400 (see FIG. 2 of Iwasa). Therefore, Iwasa fails to teach "said transistor being on said first side of said deep trench capacitor" and said third region (in claim 1) or said buried strap (in claim 8) "being on said second side of said deep trench capacitor" as set forth in amended independent claims 1 and 8.

In addition, Iwasa also fails to teach any "buried strap" recited in claim 8. Although the Examiner construed the region #100 (11 + 15) as the buried strap, Applicants respectfully disagree because Iwasa only teaches "low and high impurity concentration doped regions 11 and 15 functioning as a drain or

source" (see col. 3, lines 23-25) and does not teach that the region #100 is a buried strap.

Since Iwasa fails to teach each and every limitation of amended independent claims 1 and 8, Applicants respectfully submit that all of the claims clearly define over the teachings of Iwasa. Accordingly, reconsideration and withdrawal of the rejections under 35 U.S.C. § 102 are respectfully requested.

Additional Claims

Claims 12 and 13 have been added for the Examiner's consideration.

Applicants respectfully submit that claims 12 and 13 depend directly from amended independent claims 1 and 8, respectively, and are therefore allowable based on their respective dependence from amended independent claims 1 and 8, which are believed to be allowable.

Favorable consideration and allowance of claims 12 and 13 are respectfully requested.

CONCLUSION

It is believed that a full and complete response has been made to the Office Action, and that as such, the Examiner is respectfully requested to send the application to Issue.

In the event there are any matters remaining in this application, the Examiner is invited to contact Joe McKinney Muncy, Registration No. 32,334 at (703) 205-8000 in the Washington, D.C. area.

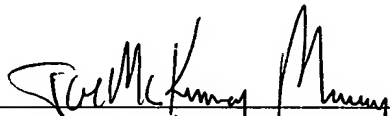
Pursuant to 37 C.F.R. §§ 1.17 and 1.136(a), the Applicants respectfully petition for a one (1) month extension of time for filing a response in connection with the present application and the required fee of \$110.00 is attached herewith.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. §§1.16 or 1.17; particularly, extension of time fees.

Respectfully submitted,

BIRCH, STEWART, KOLASCH & BIRCH, LLP

By


Joe McKinney Muncy
Reg. No. 32,334

KM/GH/mmi/asc
4392-0137P

P. O. Box 747
Falls Church, VA 22040-0747
(703) 205-8000

AMENDMENTS TO THE DRAWINGS

Attached hereto are two (2) sheets of corrected formal drawings that comply with the provisions of 37 C.F.R. § 1.84. The corrected formal drawings incorporate the following drawing changes:

FIG. 1: The reference numbers 112 and 114 have been removed;
and

FIG. 3: The reference numbers 324, 326, 328 and 334 have
been removed.